IN THE CLAIMS:

Cancel claims 19 and 26-53 without prejudice or admission, amend claims 20-23 and 25, and add new claims 54-76 as shown in the following listing of claims, which replaces all previous listings and versions of claims.

1. - 19. (canceled).

20. (currently amended) ~~A method of manufacturing a multi-tip probe according to claim 19; wherein the step of forming a plurality of electrodes comprises the steps of~~ A method of manufacturing a multi-tip probe comprising the steps of:

forming a cantilever using photolithographic techniques;

forming a plurality of lead portions ~~by lithography at a base portion of~~ along the cantilever~~, forming~~ and which terminate in a conductive shunt area at a distal end of the ~~cantilever,~~ cantilever; and

forming a plurality of electrodes at the conductive shunt area by sputtering or gas-assisted etching of the conductive shunt area ~~distal end of the cantilever~~ using a focused charged particle beam.

21. (currently amended) ~~A method of manufacturing a multi-tip probe according to claim 19; wherein the step of forming a plurality of electrodes comprises the steps of~~ A method of manufacturing a multi-tip probe comprising the steps of:

forming a cantilever using photolithographic techniques;

forming a plurality of lead portions ~~by lithography at a base portion of~~ along the ~~cantilever,~~ cantilever; and

forming a plurality of electrodes at the distal end of the cantilever by irradiating the distal end of the cantilever with a focused charged particle beam while blowing a source gas toward the distal end.

22. (currently amended) A method of manufacturing a multi-tip probe according to claim 20 ~~19~~; wherein the ~~step of forming a~~ plurality of electrodes ~~comprises the steps of forming the respective electrodes~~ are spaced apart from one another at a spacing of less than one micron ~~from an adjacent electrode~~.

23. (currently amended) A method of manufacturing a multi-probe according to claim ~~19~~ 20; further comprising the step of forming a needle-shaped probe on a distal end of each of the electrodes by chemical vapor deposition using a focused ion beam device.

24. (previously presented) A method of manufacturing a multi-tip probe according to claim 23; wherein the step of forming a needle-shaped probe further comprises the step of forming the needle-shape probe with a curved structure so as to have resilience.

25. (currently amended) A method of manufacturing a multi-tip probe according to claim ~~19~~ 20; wherein the step of forming the cantilever using photolithographic techniques includes the step of forming a convex portion at the distal end of the cantilever; and the step of forming a plurality of electrodes on the cantilever comprises forming the plurality of electrodes on the convex portion.

26. - 53. (canceled).

54. (new) A method of manufacturing a multi-tip probe comprising the steps of:

providing a cantilever having a distal end portion on which is formed a conductive film; and

dividing the conductive film into a plurality of electrodes by sputter etching or gas-assisted etching of the conductive film using a focused charged particle beam thereby forming a multi-tip probe.

55. (new) A method according to claim 54; wherein the plurality of electrodes have distal ends spaced apart less than one micron from one another.

56. (new) A method according to claim 55; wherein the providing step comprises providing a cantilever, and forming a plurality of conductive film lead portions extending lengthwise along the cantilever and terminating at a distal end portion thereof in a common conductive film.

57. (new) A method according to claim 56; wherein the conductive film lead portions and the common conductive film are formed by lithography.

58. (new) A method according to claim 56; further comprising the step of forming a needle-shaped probe on a distal end of each of the electrodes.

59. (new) A method according to claim 58; wherein each needle-shaped probe has a curved shape.

60. (new) A method according to claim 56; wherein the dividing step comprises dividing the common conductive film into a plurality of electrodes by sputter etching the common conductive film using a focused charged particle beam.

61. (new) A method according to claim 56; wherein the dividing step comprises dividing the common conductive film into a plurality of electrodes by sputter etching the common conductive film using a focused charged particle beam while directing an assist gas toward the distal end portion of the cantilever.

62. (new) A method according to claim 55; wherein the plurality of electrodes comprises four electrodes.

63. (new) A method according to claim 55; wherein the conductive film is formed of one of platinum, aluminum and tungsten.

64. (new) A method according to claim 54; wherein the providing step comprises providing a cantilever, and forming a plurality of conductive film lead portions extending lengthwise along the cantilever and terminating at a distal end portion thereof in a common conductive film.

65. (new) A method according to claim 64; wherein the conductive film lead portions and the common conductive film are formed by lithography.

66. (new) A method according to claim 54; further comprising the step of forming a needle-shaped probe on a distal end of each of the electrodes.

67. (new) A method according to claim 66; wherein each needle-shaped probe has a curved shape.

68. (new) A method according to claim 54; wherein the dividing step comprises dividing the common conductive film into a plurality of electrodes by sputter etching the common conductive film using a focused charged particle beam.

69. (new) A method according to claim 54; wherein the dividing step comprises dividing the common conductive film into a plurality of electrodes by sputter etching the common conductive film using a focused charged particle beam while directing an assist gas toward the distal end portion of the cantilever.

70. (new) A method according to claim 54; wherein the electrodes extend generally parallel to one another and are spaced apart from one another at a spacing less than one micron.

71. (new) A method of manufacturing a multi-tip probe comprising the steps of:

providing a cantilever having a distal end portion;

forming a plurality of conductive lead portions extending lengthwise along the cantilever; and

forming a plurality of electrodes on the distal end of the cantilever and in contact with respective ones of the conductive lead portions by irradiating the distal end portion of the cantilever with a focused charged particle beam while directing a source gas toward the distal end portion thereby forming a multi-tip probe.

72. (new) A method according to claim 71; wherein the plurality of electrodes have distal ends spaced apart less than one micron from one another.

73. (new) A method according to claim 72; further comprising the step of forming a needle-shaped probe on a distal end of each of the electrodes.

74. (new) A method according to claim 73; wherein each needle-shaped probe has a curved shape.

75. (new) A method according to claim 71; wherein the plurality of electrodes comprises four electrodes.

76. (new) A method according to claim 71; wherein the electrodes extend generally parallel to one another and are spaced apart from one another at a spacing less than one micron.